

SOCIAL CARBON APPLICABILITY – CERAMIC INDUSTRY

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02/2008¹

Social Carbon Methodology has been applied in the Ceramic Industry since 2006. The first project was *São Judas Tadeu* Ceramic, in the State of Tocantins, Brazil. It is a Voluntary Market Project that consists in the switching of native wood (non renewable biomass) to rice husk (renewable biomass) in the ceramic's ovens.

After this project, more 36 projects were developed till now. Thirteen projects at *Pará*, ten projects at São Paulo, eight projects at Rio de Janeiro, two projects at Tocantins, one project at *Alagoas*, one project at *Rondônia* and one project at Rio Grande do Norte. All this projects are Voluntary Market Projects and switch non renewable biomass.

There are different kinds of renewable biomass being used in those projects. At *Pará*, for example, *açaí* pit and sawdust are substituting the native wood in the ceramic's oven. At *Alagoas*, the renewable biomasses are sawdust, sugar cane bagasse, coconut husk and bamboo. In general, before the projects, the ceramics used to use wood from Atlantic Forest, *Caatinga*, *Cerrado* and Amazon biomes.

The principal objective of those fuel-switch projects is to substitute the wood of highly diversified biomes for different kinds of renewable fuels having as additional benefit the reduction of deforestation while also reducing the anaerobic decay of agricultural waste in the surrounding region, which would otherwise release methane, an extremely potent greenhouse gas.

Social Carbon Methodology is being applied at those projects with the aim of the continuous improvement of *socioenvironmental* quality of the project and also of the enterprise. The focus here is the development of indicators that make possible the sustainability of the Ceramic that is involved at the project giving news perspectives for the enterprise and all people involved on this. After the initial diagnostic, plans to invest

¹ First published at: <http://www.climate-1.org/>

the resources obtained with the carbon credits are developed for the Ceramic so as to improve its sustainability and incentives the sustainable management of the environment.

The ceramist industry in Brazil, especially the ones of the north and northeast areas, is composed, in its majority, by small companies. Although they possess an extensive experience in the production of structural pieces, those companies still present a low technological performance in what refers to the efficiency of the processes, the quality of the production and the impacts to the environment. Additionally, the workers' profile of the sector is characterized by lacks in socioeconomic aspects, as low education, poor professional training and financial difficulties.

The experience and works accomplished with the industries of the sector demonstrated that the reach of sustainable development would demand internal actions of social and environmental responsibility focused in the improvement of the work conditions, of the human and technological resources and also in the reduction of environmental impacts through the efficient and rational use of the available resources.

Those projects are contributing, at the same time, for the reduction of the greenhouse gases level emissions and for the sustainable development of the industry, providing:

- The reduction of renewable biomass deposited around rivers and streams;
- The increase of job opportunities near the region where the ceramic industry is located;
- The diversification of sources that generates thermal energy;
- The use of clean and efficient technologies, and natural resources preservation, being in accordance with Agenda 21 and with Brazilian Sustainable Development Criteria;
- More efficiency in the use of natural resources, related to the fact of the increase on the use of waste on the region that projects are being developed, preventing that a new non-controlled place for waste deposit appears.
- Contribution on the conservation of important *biomes* that are exposed to a great deforestation pressure and have been losing a considerable part of their native area for agricultural explorations and industry activities.

After the elaboration of those projects, was perfectly clear how is possible to potentiate the benefits of such procedure through the Social Carbon Methodology approach.